Gateway2Earth/AmericaView

OhioView Pilot and the LDCM

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The Problem

Lack of timely access to satellite and other geospatial information for education and research.

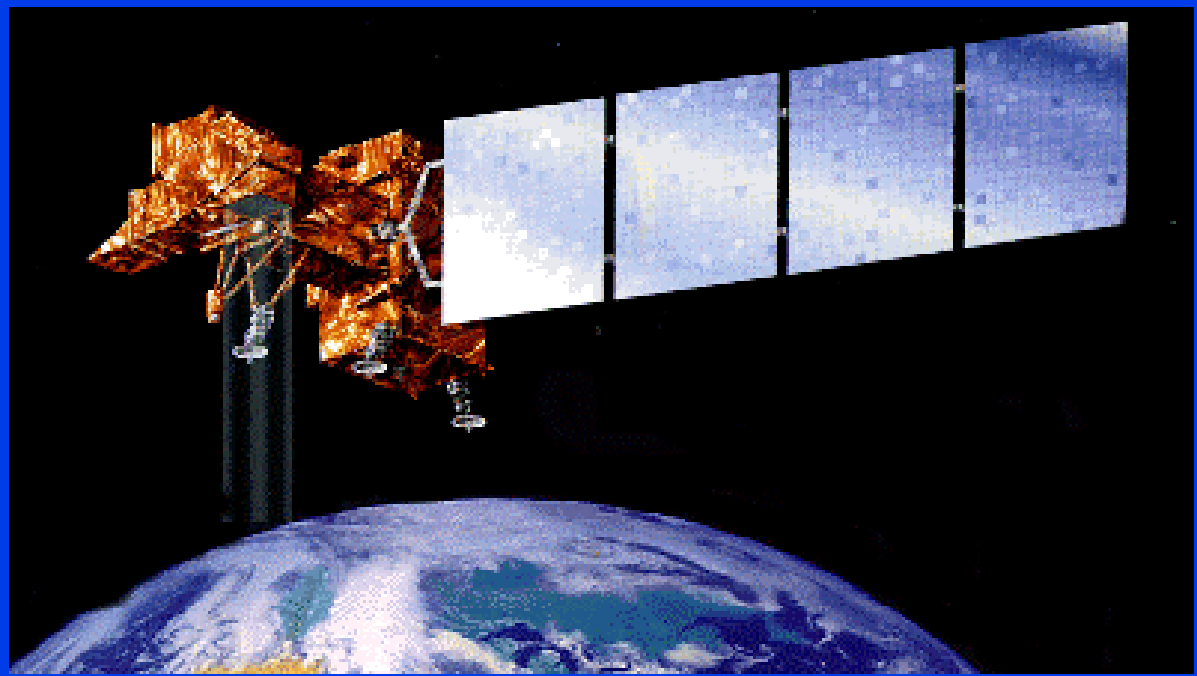
Solution

- Form a public-private partnership.
- Prepare for educational and commercial systems.
- Both systems must provide
  - Commercial and Government Geospatial Data
  - Ultra-high bandwidth
  - Hybrid space and terrestrial network
  - 2-way, IP-based
  - Server- and Client-Side Processing

The G2E/OhioView Pilot

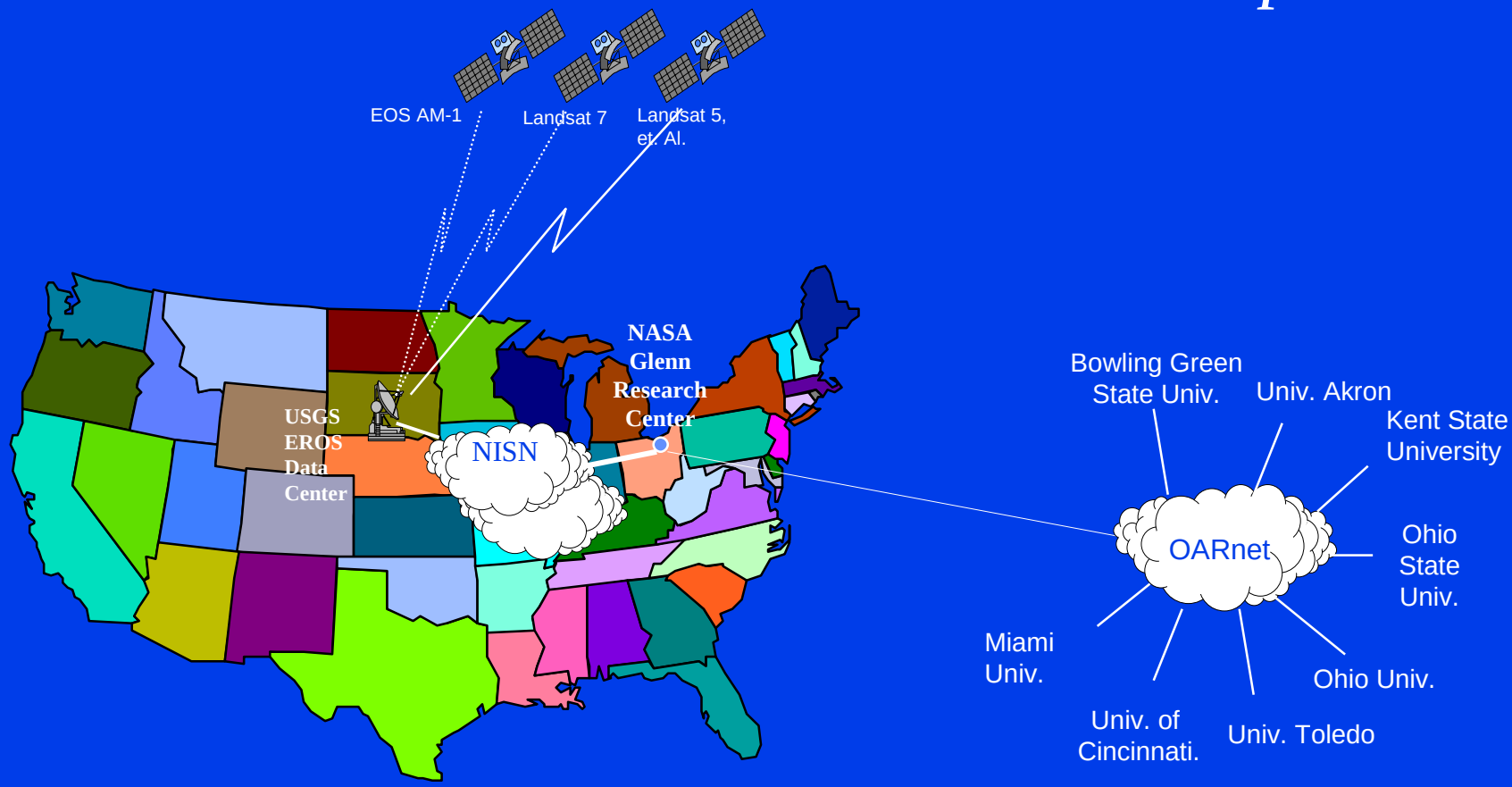
G2E/OhioView is a consortium of universities, libraries, and state and local government agencies working with the USGS and NASA to provide affordable, integrated access to and delivery of satellite and other geospatial data for education and research.

The Landsat program is the foundation of the OhioView Pilot



G2E: OhioView Pilot 1999 Mosaic

G2E/OhioView Pilot Network Map



Successful Launch of Landsat-7
April 15th, 1999

Successful Launch of Terra
December 18th, 1999

FY2001 G2E/OhioView Consortia Partners

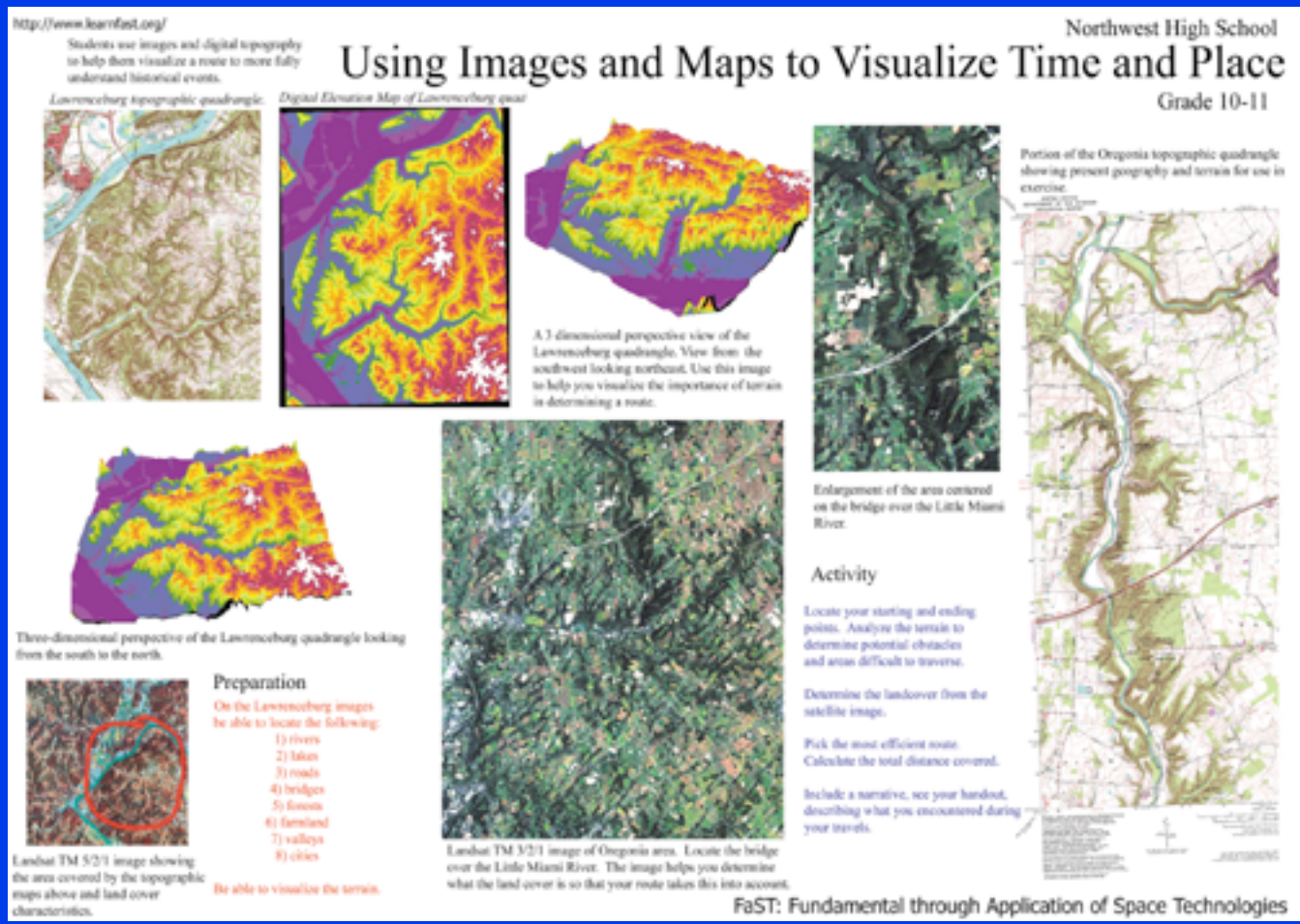
- OhioView Consortium
- Mississippi Space Commerce Initiative
- Texas Natural Resource Information System (TNRIS)
- National Interagency Fire Center (NIFC)
- California Land Science Information Project
- Leech Lake Tribal College
- Sinte Gleska University

G2E/OhioView Data and Visualization Servers

FY2002 G2E/AmericaView Consortia Partners

- 20 states
- 16 commercial partners
- 6 federal research laboratories
- Listed on
- http://gateway2earth.org

G2E/OhioView K-12 Educational Applications

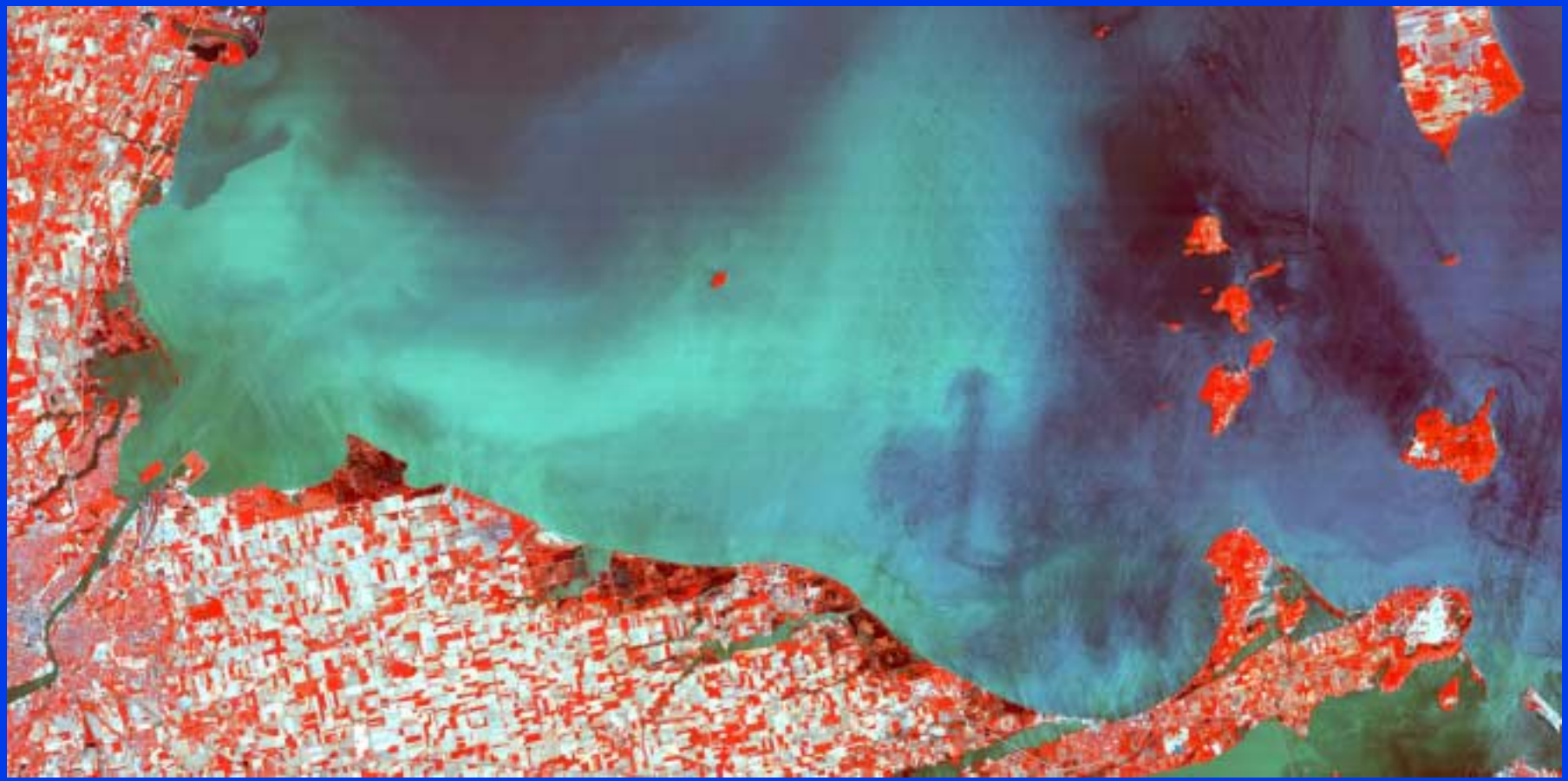


G2E/OhioView

Laboratory Materials

Example: One half of U. Cincinnati's advanced remote sensing course is based on G2E/ OhioView Landsat-7 data.

Sediment Transport to and within Lake Erie



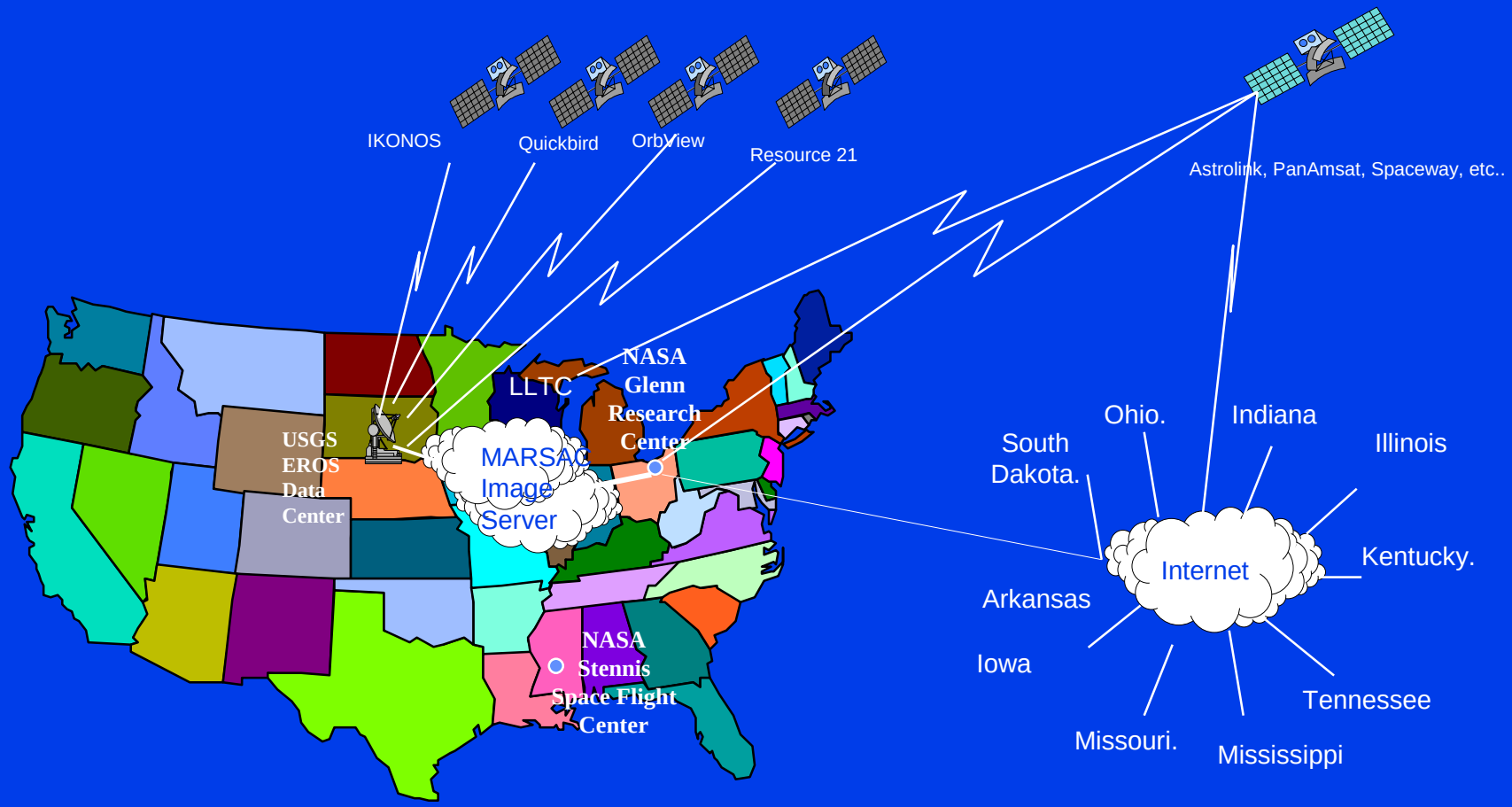
G2E/OhioView Native American Remote Sensing Education and Research Project

Leech Lake Reservation, Chippewa Tribe,
In Chippewa National Forest, Northern Minnesota

G2E/OhioView Native American Remote Sensing Education and Research Project

NASA Glenn's Advanced Communications Technology Satellite provides 2-way, high-bandwidth connectivity for education.

LLTC Prototype Network



Federal Satellite Data Policy and the LDCM

Education and Research need a spectrum of government and commercial satellite data sources.

Federal Satellite Data Policy and the LDCM

Need the USGS and NASA to expand licenses of sub-5 meter very high-resolution commercial data for education and research.

If paid for with public funds, these data should be licensed for the public domain after three years and should be priced (higher) accordingly.

Federal Satellite Data Policy and the LDCM

Ikonos, Quickbird….
(how about some more bands in the infrared???)

Federal Satellite Data Policy and the LDCM

Need the USGS and NASA to purchase 5 meter high-spatial and spectral-resolution commercial data to compliment and improve its 1:24,000 scale public domain products.

This program should parallel the USGS DOQ program.

Federal Satellite Data Policy and the LDCM

New satellites!

Federal Satellite Data Policy and the LDCM

Need the USGS to continue the renaissance of remote sensing by operating a series of 30 meter MS 10 meter PAN Landsat follow-on satellites to provide affordable, hassle-free, entry-level satellite DATA. (not full resolution images) for education and research.

Federal Satellite Data Policy and the LDCM

EO-1-like instrument???

Federal Satellite Data Policy and the LDCM

The LDCM should include VAR funding for:

1. Annual national Landsat mosaics.
2. Annual global Landsat mosaics.
3. Migration of a globally consistent (same geometric, radiometric, map datum and map projection parameters) Landsat data set to USGS EDC after 3 years of commercial exploitation.

LDCM and Federal Policy

However…
The LDCM should include on-line Landsat DATA access for .edu, .gov, .mil, .us which should be budgeted as part of the mission.

Federal Satellite Data Policy and the LDCM

Because…
The phenomenal growth of GIS was fueled largely by the availability of affordable ENTRY-LEVEL government (especially USGS and Census) data.

The new USGS Landsat data policy is starting to do the same for REMOTE SENSING and should be continued.

Federal Satellite Data Policy and the LDCM

This BALANCED policy provides:

1. Economic stimulus for commercial satellite DATA providers
2. Economic stimulus for the commercial remote sensing SOFTWARE industry.
3. Economic stimulus for remote sensing VARs.

Federal Satellite Data Policy and the LDCM

4. High quality jobs for our students.
5. Affordable, timely, and scientifically useful data for education and research and governmental obligations.

Gateway to Earth's Location

http://gateway2earth.org